



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,287	11/06/2001	Reinhard Janka	GK-ZEI-3140	5952
26418	7590	09/19/2006	EXAMINER	
REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650			GAKH, YELENA G	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/009,287

**Applicant(s)**

JANKA ET AL.

**Examiner**

Yelena G. Gakh, Ph.D.

**Art Unit**

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12, 15-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1743

### **DETAILED ACTION**

1. Amendment filed on 08/07/06 is acknowledged. Claims 12, 15-19 and 21-23 are pending in the application. The amendment resulted in creation of the lack of unity for the inventions of Group I, claims 12, 15-18 and Group II, claims 19 and 21-23, since the common inventive special technical feature was the apparatus of claim 12. At this point the method of Group II can be performed with 3D fluorescence microscope known in the art (see e.g. Diaspro et al. or Qian et al. IDS). This invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 19 and 21-23 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 12 and 15-18 are examined on merits.

### ***Response to Amendment***

2. The examiner modifies rejections under 35 U.S.C. 112, second paragraph and rejections over the prior art in light of the amendment.

### ***Information Disclosure Statement***

3. The examiner respectfully requests the Applicants to provide a highly pertinent disclosure of Carl Zeiss' device combining ConfoCor 2 and LSM (laser scanning microscope), which became available to the public in 2000.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1743

5. Claims 12 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites “at least one device unit for analyzing molecular interactions in small volumes”. It is not clear, which specific “at least one device” capable of analyzing molecular interactions is meant in the claim? While at the end the claim recites that the computer performs analysis of molecular interactions based on fluorescence correlation spectroscopy (FCS) and the unit for imaging, such recitation is in discrepancy with a very broad definition of the “at least one device unit for analyzing the molecular interactions”. If there are many devices capable of providing data for performing FCS, the examiner is not aware of them. If there is one particular device, which is capable of providing such data, which is a fluorescence correlation spectroscopy, it should be explicitly recited in the claim. Otherwise the claim recites a contradictory subject matter and is rendered unclear and indefinite.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 12 and 15-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Carl Zeiss’ device combining ConfoCor 2 and LSM (laser scanning microscope) (2000), referred to by Weissbart et al. (Current Pharmaceutical Biotechnology, 2004).

Weissbart describes device disclosed by Carl Zeiss in 2000, which is a combination of a two-channel fluorescence correlation spectroscopy (ConfoCor 2), which has a two-channel detection system and thus is capable of measuring cross-correlation, and laser scanning microscope (LSM). According to Weissbart’s description of this device, it totally corresponds to the device recited in claims 12 and 15-18.

Art Unit: 1743

***Response to Arguments***

8. Applicant's arguments with respect to claims 12 and 15-18 have been considered but are moot in view of the new ground(s) of rejection.

In response to the present Office action the examiner respectfully requests the Applicants to provide a full disclosure of Carl Zeiss' ConfoCor 2-LSM device, as well as their arguments directed to a clear and unambiguous differentiation between the claimed invention and the device. If the claims will be accordingly amended and the differences are clearly indicated, the examiner will rejoin the apparatus and method claims, when the method claims will be amended correspondingly to allowable apparatus claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (571) 272-1257. The examiner can normally be reached on 9:30 am - 6:00 pm.

Art Unit: 1743

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/17/06



**YELENA GAKH**  
**PRIMARY EXAMINER**